REMARKS

1. 35 USC § 101.

Claims 1-51 are rejected under 35 USC § 101 because the claimed invention is deemed by the Examiner to be directed to non-statutory subject matter. Applicant respectfully disagrees. Nonetheless, Applicant has amended Claim 1 to indicate that the invention, "a computer implemented method of predicting a likelihood of collecting on a delinquent debt on account" is a method "comprising the computer implement steps of...". Because each of the steps of the claimed invention are deemed to be computer implemented steps, the claim sets forth a "structural/functional interrelationship which can only be computer implemented." As such, the claim should be considered to have a technical basis. Applicant notes that the citation in the Office Action describes the requirement that such limitation be in the body of the claim. However, it is also noted that the set forth opinion is "used only for content and reasoning since not precendential." Applicant of the opinion that there is no other interpretation of the claim as now amended, except that each of these steps recited in the body of the claim are implemented by computer because the claimed method is deemed to comprise "computer implemented steps." Accordingly, Applicant deems the application to be in harmony 35 USC §101.

2. 35 USC § 112.

Positive recitation of the limitation of "storing a predictive model of debt collection likelihood" is provided. That is, the claim now recites the step of "storing said predictive model."

The phrase "to determine a subject matter similarities" has been revised to indicate that the step requires "determining" a subject matter similarities.... Accordingly the phrase is not an intended use, but as is an affirmative recitation of a positive limitation of the claimed method.

The limitation "selecting a collection method" is objected to by the Examiner. Responsive thereto, the Applicant has clarified that the first reference to "collection methods," *i.e.* in the first step of the claim, now refers to "the success of the collection methods used in each account." Thus, the first recitation of "collection methods" is to specific collection methods used in each account. The claim is also amended to state that such methods are "specific collection methods." With regard to the step objected to by the Examiner, "selecting a collection method," Applicant deems this step to be clearly indicative that the selection step is of any collection method available and that the former statement of collection methods merely refers to the specific collection methods used in each account. Thus, the claim recites specific collection methods and a generic set of collection methods, *i. e.* the specific collection methods that are used in each account and those that are selected pursuant to the method.

Applicant has struck the claim language "but not limited to" from Claim 1.

With regard to the various objections raised with regard to lack of antecedent basis, Applicant has made appropriate corrections to Claims 43, 44, 45, 46, 48, and 51.

3. 35 USC § 103.

Claims 1-51 are rejected under 35 USC § 103 as being unpatentable over Aleia *et al* (US Patent 5,991,733) in view of Caid *et al* (US Patent 5,619,709). Rather than address the substantive issues of the rejections, Applicant notes that the Examiner (page 6 of the Office Action) relies on Caid as teaching the steps of "storing documents and/or notes model as context vectors', determining a document or notes word space; transforming current document/notes into document context vector, and performing any of: comparing said document context vector against context vector of said document/notes to determine the subject matters similarities result and using said result as input into a model; and using components of said documents context vector expressed in said context

vector eigenbasis as input into a model. Applicant notes that the Examiner has erroneously referred to citations in Aleia but Applicant is of the opinion that the Examiner intended that the citations to textural portions of the documents were intended to refer to Caid.

In view of the foregoing, the only basis for maintaining the rejections of the Claims as they stand with regard to the prior art is the combination of Aleia and Caid. Applicant notes in this regard that Caid is assigned to HNC, Inc. of San Diego, California. HNC, Inc., at the time the present invention was made was the common assignee of both the Caid reference and the subject patent application. As proof of the common ownership, Applicant submits herewith a copy of an assignment in connection with the subject application. Subject application was assigned to HNC, Inc. Applicant's attorney attests to the fact that these applications were commonly owned at the time the subject invention was made. Accordingly, Caid is disqualified from being used in the rejection under 35 USC against the claims of the subject application (MPEP 706.02 (i)) 2). Because they were owned by the same entity at the time the invention was made. Accordingly there is no basis under 35 USC § 103 for rejecting the pending claims in the subject application and the application is therefore deemed to be in allowable condition.

4. Applicant thanks the Examiner for his courtesy and assistance during the Interview, held on November 03, 2005. Applicant restates herein that Aleia does not teach that which the Examiner asserts it does. For example, the Examiner's "Response to Arguments" state that "the action taken by a collector and their customers are part of collector's notes." However, neither at Column 11, lines 2-23, nor anywhere else, does Aleia teach Applicant's claimed "collector note model." To make it clear, Applicant's "model" is now claimed as being "statistically generated." There is no "model" as such in Aleia. Rather, the Examiner's citation to Aleia concerns at real time interaction with a claims system. A person skilled in the art would understand that this does not involve

any "model." The application being allowable because Caid is not prior art, Applicant's comments and claim revisions are entered only for purposes of clarity.

As for distinguishing Alela's data mining from Applicant's claimed prediction, the Examiner is referred to The Elements of Statistical Learning, Data Mining, Inference, and Prediction, Trevor Hastie, Robert Tishirani and Jerome Friedman, Springer-Verlag, (2001).

The authors are all well-respected professors of statistics at Stanford University. It can be seen from the very title is that "Data Mining" is considered distinct from "Prediction." The first three paragraphs of the Preface are as follows:

"The field of Statistics is constantly challenged by the problems that science and industry brings to its door. In the early days, these problems often came from agricultural and industrial experiments and were relatively small in scope. With the advent of computers and the information age, statistical problems have exploded both in size and complexity. Challenges in the areas of data storage, organization and searching have led to the new field "data mining"; statistical and computational problems in biology and medicine have created "bioinformatics." Vast amounts of data are being generated in many fields, and the statistician's job is to make sense of it all: to extract important patterns and trends, and understand "what the data says." We call this *learning from data.*

The challenges in learning from data have led to a revolution in the statistical sciences...

The learning problems that we consider can be roughly categorized as either *supervised* or *unsupervised.* In supervised learning, the goal is to predict the value of an outcome measure based on a number of input measures; in unsupervised learning, there is no outcome measure, and the goal is to describe the associations and patterns among a set of input measures.

Italics in the original: Applicant has underlined data mining. Again, note the distinction between the realms of data mining with statistical learning. Chapter 1 of the book begins:

Statistical learning plays a key role in many areas of science, finance and industry. Here are some examples of learning problems:

> Predict whether a patient, hospitalized due to a heart attack, will have a second heart attack...
>
> Predict the price of a stock in 6 months from now...

This book is about learning from data. In a typical scenario, an outcome measurement, usually quantitative (a stock price) or categorical (heart attack/no heart attack), that we wish to predict based on a set of *features* (diet and clinical measurements). A *training set* of data, in which we observe the outcome and feature measurements for a set of objects (such as people). Using this data we build a prediction model, or *learner*, which enables us to predict the outcome of new unseen objects. A good learner is one that accurately predicts such an outcome.

Again, italics are found in the original, while Applicant has underlined prediction model.

Should the Examiner deem it helpful, he is encouraged to contact Applicant's attorney, Michael A. Glenn, at 650-474-8400.

Respectfully submitted,

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